

*Docket No. 0094.046A***REMARKS**

Claims 1-30 were presented at the time of filing. The application was subject to restriction and election of species, and the invention of Group I, and the species of group I, claims 1-3, and 5-27 were elected. Therefore, claims 1-27 are now pending.

The Office Action indicates that claims 15 and 16 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. This indication of allowable subject matter is gratefully acknowledged.

Rejections of the claims are addressed separately below in the order raised in the outstanding Office Action.

Rejections Under 35 U.S.C. § 112:

Claims 14-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Office Action states that specific language in claim 14 is considered confusing. Claim 14 is now amended to correct the language of the preamble of step (c), so that the preamble and individual steps of the claim are now internally consistent. The preamble now reads "A process for the preparation of a siloxane oligomer", and step (c) now reads "alkoxysilyl silane or siloxane". Support for the amendment may be found in the specification, page 10, paragraph 0028. It is believed that the rejection is hereby overcome.

Rejections Under 35 U.S.C. § 102(b):

Claims 1-3 and 5-13 are rejected under 35 U.S.C. § 102(b). These claims are now canceled by amendment.

Rejections Under 35 U.S.C. § 103(a):

Claims 14 and 17-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,484,950, to Crivello (Crivello I), in view of Crivello et al. (Chem. Mater., 1997) (Crivello II). The rejection is traversed.

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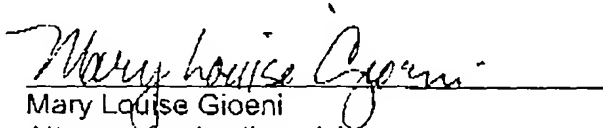
Crivello I relates to a selective hydrosilation process for preparation of asymmetrical silanes or siloxanes, particularly epoxy silyl siloxanes. Crivello II describes the sol-gel condensation of two epoxy alkoxy silane coupling agents to form polymerizable siloxane oligomers. The Office Action states that it would have been obvious to use the products of Crivello I in the condensation of Crivello II with the motivation that Crivello I sets forth that the compounds are useful for the synthesis of oligomers. Applicant respectfully disagrees that the general statement in Crivello I that the molecules with two different sites for reaction can be used to prepare reactive intermediates, oligomers, and polymers (column 1, lines 35-40) provides the specific motivation to substitute these specialty materials for the garden-variety epoxy alkoxy silane coupling agents in the process of Crivello II. Accordingly, applicant does not admit that a *prima facie* case of obviousness has been established.

However, even if a *prima facie* case were established, it is suggested that the unexpected advantages of the claimed starting materials over the starting materials used in Crivello II would be more than sufficient to overcome the rejection. These advantages are disclosed in the application as filed in examples 7 and 9. The examples compare properties of a polymer from the epoxy alkoxy silane coupling agent utilized in Crivello II, 2-(3, 4-epoxycyclohexylethyl)trimethoxysilane, designated 1b in the application, with those of polymers from a series of epoxy silyl siloxane monomers/oligomers, designated VIIIb, IXb and Xb. Structures of the monomers are shown in table 3 of the application. Monomers VIIIb, IXb and Xb differ in the length of the siloxane side chain pendant from the siloxane polymer backbone. In example 7, on page 22, polymerization of 1b alone resulted in low conversion of the monomer while polymers from VIIIb, IXb, and Xb had significantly higher conversions. Results are displayed graphically in FIG. 4. The figures shows that the ultimate conversion of 1b was only about 60%, while conversion of VIIIb, IXb, and Xb was over 90%. In example 9, films derived from polymers of 1b were brittle and unmanageable, while films derived from polymers from VIIIb, IXb, Xb were tough and flexible. These results are even more surprising when it is considered that 1b differs from its closest analog, VIIIb by only a -CH₂CH₂-Si-O-Si- linkage between the siloxane back bone and epoxy cyclohexylethyl group. It can therefore be seen that there is a discontinuity between the

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properties of the Ib polymer and those of polymers from VIIIb, IXb and Xb produced by the process of the claims and that this is not predicted by Crivello I or Crivello II. Because of this unexpected aspect of the present invention, applicants submit that claim 14 and its dependent claims 17-27 are not obvious over the cited reference. It is believed that the rejection is hereby overcome.

Respectfully submitted,


Mary Louise Gioeni
Attorney for Applicant(s)
Registration No. 41,779

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HESLIN ROTHENBERG FARLEY & MESITI, P.C.

5 Columbia Circle

Albany, New York 12203

Telephone: (518) 452-5600

Facsimile: (518) 452-5579